

Missouri Department of Natural Resources
Air Pollution Control Program

PART 70

PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

Operating Permit Number: OP2006-042

Expiration Date: JUL 12 2011

Installation ID: 071-0068

Project Number: 2004-12-077

Installation Name and Address

Meramec Group, Inc.
338 Ramsey Street
Sullivan, MO 63080
Franklin County

Parent Company's Name and Address

Meramec Group, Inc.
338 Ramsey Street
Sullivan, MO 63080

Installation Description:

Meramec Group, Inc. manufactures molded polyurethane shoe soles and industrial plastic parts. Isocyanate prepolymer and polyurethane polyol mixture are mixed and poured into molds that are pre-sprayed with a mold release compound and occasionally pre-sprayed with lacquer. After removal from the molds, the products are either directly shipped or sprayed coated with lacquer and then shipped. The installation is a major source of volatile organic compounds.

JUL 13 2006

Effective Date

Steven J. L. K.

Director or Designee

Department of Natural Resources

for J L K

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Meramec Group, Inc. manufactures molded polyurethane shoe soles and industrial plastic parts. Isocyanate prepolymer and polyurethane polyol mixture are mixed and poured into molds that are pre-sprayed with a mold release compound and occasionally pre-sprayed with lacquer. After removal from the molds, the products are either directly shipped or sprayed coated with lacquer and then shipped. The installation is a major source of volatile organic compounds.

The reported actual emissions for the past five years for the installation are listed below:

Reported Air Pollutant Emissions, tons per year							
Year	Particulate Matter ≤ Ten Microns (PM-10)	Sulfur Oxides (SO _x)	Nitrogen Oxides (NO _x)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2005	0.05	0.00	0.35	48.92	0.07	0.00	*
2004	0.04	0.00	0.28	56.21	0.06	0.00	*
2003	0.05	0.00	0.29	66.31	0.06	0.00	*
2002	0.06	0.00	0.36	67.71	0.08	0.00	*
2001	0.06	0.00	0.38	56.84	0.08	0.00	*

* Although the table includes no values for Hazardous Air Pollutants, the installation did emit Hazardous Air Pollutants during the years 2001-2005. The HAPs emissions were reported as VOCs on Form 2T pages of the Emission Inventory Questionnaires in the applicable years.

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emit air pollutants and which are identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit
EU0010	Polyurethane Molding Lines
EU0020	Paint Spray Booths
EU0030	Paint Spray Booth for Urethane Molds
EU0035	Plasma Metal Spray Booth
EU0040	Sandblasting
EU0045	Abrasive Cleaning with Glass Beads
EU0050	Epoxy Application
EU0060	Loni Finishing Process
EU0070	Automated Painting Process

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Description of Emission Source

Mold Cleaner

Boilers, Natural Gas Fired, 2.3115 MMBtu/hr

Space Heaters, Natural Gas Fired, 2.18 MMBtu/hr

Water Heaters, Natural Gas Fired, 1.6742 MMBtu/hr

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

- 1) Permit to Construct, Permit Number: 072002-010A
- 2) Permit to Construct, Permit Number: 042005-002
- 3) Permit to Construct, Permit Number: 062005-003
- 4) Permit Number 062005-003A – Amendment to Permit Number 062005-003

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

Permit Condition PW001

10 CSR 10-6.170

Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

1. The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line or origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
2. The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
3. Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary.

Monitoring/Recordkeeping:

1. The permittee shall conduct inspections of its installation sufficient to determine compliance with this regulation. The source representative would maintain a log noting:
 - a) Whether any air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin;
 - b) Whether the visible emissions were normal for the installation.If no visible or other significant emissions are observed, then no further observations are required. If a violation of this regulation is discovered, the source representative would indicate the cause of the abnormal emissions and any corrective action(s) taken. The source representative will also indicate the total duration of any visible emission incident as part of the log described above. Attachment A contains a log including these recordkeeping requirements. This log, or an equivalent created by the permittee, must be used to certify compliance with this requirement.
2. The following monitoring schedule must be maintained:
 - a) Monthly observations shall be conducted for a minimum of eight (8) consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every three months. If a violation is noted, monitoring reverts to monthly.

Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

Permit Condition PW002

10 CSR 10-6.220

Restriction of Emission of Visible Air Contaminants

Emission Limitation:

1. No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any new source any visible emissions with an opacity greater than 20%.
2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

Monitoring:

1. The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
2. The following monitoring schedule must be maintained:
 - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
 - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
3. If the source reverts to monthly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Recordkeeping:

1. The permittee shall maintain records of all observation results (see Attachments B-1 or B-2), noting:
 - a) Whether any air emissions (except for water vapor) were visible from the emission units,
 - b) All emission units from which visible emissions occurred, and
 - c) Whether the visible emissions were normal for the process.
2. The permittee shall maintain records of any equipment malfunctions.
3. The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment B-3)
4. Attachments B-1, B-2 and B-3 contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

Reporting:

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
2. Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

EU0010 through EU0050			
EU ID	EIQ Reference # (Year)	General Description	Manufacturer/ Model #
EU0010	EP-04 (A-E) (2004) (Meramec Industries)	Eight (8) Polyurethane Molding Lines Installed post-1972	Custom Made
EU0020	EP-10 (2004) (Meramec Industries)	Paint Spray Booths, Installed 2000 Four (4) Manual Spray Booths, Base Coat Application, Top Coat Application and Masked Paint Application	Fancu PM61
EU0030	EP-02 ¹ (Moldtech)	Paint Spray Booth for Urethane Molds Installed 1981	Custom Paint Booth with Devilbiss Gun
EU0035	EP-03 ¹ (Moldtech)	Plasma Metal Spray Booth Installed 1991	Binks Booth With Tafa Hobart Metal Sprayer, Model 30-8A
EU0040	EP-04A ¹ (Moldtech)	Sandblasting Installed 1991	Clemco, Model BNP56-300R&DF1Ph
EU0045	EP-04B ¹ (Moldtech)	Abrasive Cleaning of Metal parts with Glass Beads, Installed 1991	Speedblaster, Model 007
EU0050	EP-06 ¹ (Moldtech)	Epoxy Application, Installed 1991	Not Available

Permit Condition EU0010-001 through EU0030-001 and EU0050-001

10 CSR 10-6.060

Construction Permits Required

Construction Permit No.: 072002-010A

Emission Limitation:

Meramec Group, Inc. shall emit less than 40.0 tons of VOCs into the atmosphere from both paint lines (EU0020) and the usage of n-pentane as a blowing agent (EU0010) at Meramec Industries; and the paint booth (EU0030), and the epoxy application (EU0050) at MoldTech in any consecutive 12-month period.

[Special Condition No. 2A]

Monitoring/Recordkeeping:

- For ease of accounting, Meramec Group, Inc. may keep track and maintain records of just the installation-wide VOCs emissions monthly to comply with the VOCs emission limitations of Construction Permits #072002-010A, #062005-003 and 042005-002 if:
 - the VOCs from the emission unit(s) covered by this permit condition are included, and
 - the installation-wide VOCs emissions are less than 40.0 tons for the most recent consecutive 12-month period.

¹ Prior emissions were low enough and not reported in 2004 EIQ

2. Whenever the most recent consecutive 12-month installation-wide sum of VOCs emissions equals 40.0 tons or more, Meramec Group, Inc. shall maintain the monthly and the sum of the most recent consecutive 12-month records of VOCs emissions from (EU0020) and the usage of n-pentane as a blowing agent (EU0010) at Meramec Industries; and the paint booth (EU0030), and the epoxy application (EU0050) at MoldTech.
 - a) Meramec Group, Inc. shall use Attachment C, or an equivalent form to demonstrate compliance with the VOCs emission limitation of Permit No. 072002-010A.
 - b) Meramec Group shall continue to maintain separate records for these emission units until such time as the aggregate VOC emissions from the entire installation has been less than 40 tons for the previous twelve months, at which time it may revert to the recordkeeping method allowed in part 1 of this section.

Reporting:

Meramec Group, Inc. shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of each month, if the records indicate that the 12-month cumulative total of VOCs emissions exceeded the limitation of Special Condition 2A (40 tons of VOC).
[Special Condition No. 2C]

Permit Condition EU0020-002 through EU0030-002

10 CSR 10-5.330

Control of Emissions From Industrial Surface Coating Operations

Emission Limitation:

The permittee shall not emit or discharge into the atmosphere any VOC from coating operations in excess of 3.5 lbs. VOC/gallon coating (minus water and non-VOC organic compounds)

Monitoring:

The permittee shall use the following procedures for determining the daily volume-weighted average ($DAVG_{vw}$) pounds of VOC emitted per gallon of coating (minus water and non-VOC organic compounds):

1. Calculate the $DAVG_{vw}$ of all coatings used as delivered to the coating applicator(s) using the following formula:

$$DAVG_{vw} = \frac{\sum_{i=1}^n (A_i \times B_i)}{C}$$

Where:

A = daily gallons each coating used (minus water and exempt solvents)

B = lbs VOC/gallon coating (minus water and exempt solvents)

C = total daily gallon coatings used (minus water and exempt solvents)

n = number of all coatings used

- a) The permittee shall determine on a daily basis the volume of coatings consumed, as delivered to the coating applicator(s).
 - b) The permittee shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating or from data determined by an analysis of each coating, as received, by EPA Reference Method 24. MDNR may require the owner or operator who uses formulation data supplied by the manufacturer of the coating to determine data used in the calculation of the VOC content of coatings by EPA Reference Method 24 or an equivalent or alternative method.
2. If the volume-weighted average mass of VOC per volume of coating (minus water and non-VOC organic compounds), calculated on a daily basis, is less than 3.5 lbs VOC/gallon coating (minus water and non-VOC organic compounds), the source is in compliance. Each daily calculation is a performance test for the purpose of determining compliance with 10 CSR 10-5.330(4)(B).

3. Records shall be retained for a minimum of five (5) years. These records shall be made available to the director upon request.

Recordkeeping:

1. The owner or operator of a coating line shall keep records detailing specific VOC sources, as necessary to determine compliance (see Attachments D-1 and D-2) These may include:
 - a) The type and the quantity of coatings used daily;
 - b) The coatings manufacturer's formulation data for each coating;
 - c) The type and quantity of solvents for coating, thinning, purging and equipment cleaning used daily;
 - d) All test results to determine capture and control efficiencies, transfer efficiencies and coating makeup;
 - e) The type and quantity of waste solvents reclaimed or discarded daily;
 - f) The quantity of pieces of materials coated daily; and
 - g) Any additional information pertinent to determine compliance.
2. Records such as daily production rates may be substituted for actual daily coating use measurement provided the owner submits a demonstration, approved by the director, that such records are adequate for the purpose of this rule. This will apply until EPA issues national daily emissions recordkeeping protocols for specific industrial classifications.

Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any deviation from or exceedance of any of the terms imposed by this regulation, or any malfunction which causes a deviation from or exceedance of this regulation.

Permit Condition EU0020-003

10 CSR 10-6.400

Restriction of Emission of Particulate Matter From Industrial Processes

Emission Limitation:

1. The permittee shall not emit particulate matter in excess of 0.27 lbs/hr from this emission unit.
2. No person shall cause, allow or permit the emission of particulate matter from any source in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases.

Monitoring:

1. Booths equipped with mat/panel filters shall not be operated without a filter in place.
2. The filters shall be inspected for holes, imperfections, proper installation or other problems that could hinder the effectiveness of the filter.
3. The filters shall be inspected each shift before spraying begins in a booth and after installation of a new filter.
4. The manufacturer's recommendations shall be followed with regard to installation and frequency of replacement of the filters.

Recordkeeping:

1. The permittee shall maintain on the premises of the installation calculations demonstrating compliance with this rule.
2. All inspections, corrective actions, and instrument calibration shall be recorded.
3. Records may be kept in either written or electronic form.

Reporting

Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

Permit Condition EU0030-004 through EU0045-004

10 CSR 10-6.060

Construction Permits Required

Construction Permit No.: 072002-010A

Emission Limitation:

1. Meramec Group, Inc. shall emit less than 15 tons of particulate matter less than ten microns in diameter (PM_{10}) into the atmosphere from the spray booth (EU0030), the plasma metal spray booth (EU0035), the sand blaster (EU0040), and the abrasive cleaner (EU0045) in any consecutive 12-month period.
[Special Condition No. 3A]
2. The fabric dust collector must be in use at all times when the abrasive cleaner with glass beads (EU0045) is in operation and shall be operated and maintained in accordance with the manufacturer's specifications.
[Special Condition No. 5]

Monitoring/Recordkeeping:

Meramec Group, Inc. shall maintain an accurate record of PM_{10} emitted into the atmosphere from the spray booth (EU0030), the plasma metal spray booth (EU0035), the sandblaster (EU0040), and the abrasive cleaner (EU0045). Attachment E or an equivalent form shall be used to demonstrate compliance with the PM_{10} emission limitation of Permit No. 072002-010A. [Special Condition No. 3B]

Reporting:

Meramec Group, Inc. shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of each month, if the records indicate that the 12-month cumulative total of PM_{10} emissions exceeded the limitation of Special Condition 3A (15 tons of PM_{10}).
[Special Condition No. 2C]

EU0060 Loni Finishing Process	
General Description:	Loni Finishing Process – applies paint to finished shoe soles
Manufacturer/Model #:	Motoman and Fanuc Motoman: UP-50 Fanuc: M-161
EIQ Reference # :	EP-27 (Meramec Industries)

Permit Condition EU0060-001

10 CSR 10-6.060

Construction Permits Required

Construction Permit No.: 042005-002

Emission Limitation:

Meramec Group, Inc. shall emit less than 40.0 tons of VOCs into the atmosphere from the Loni finishing process (EU0060) in any consecutive 12-month period. [Special Condition No. 1A]

Operational Limitation/Equipment Specifications:

1. High efficiency filters must be in use at all times when the spray guns are in operation and shall be operated and maintained in accordance with the manufacturer's specifications. [Special Condition No. 2]
2. The permittee shall keep the paint solvents and cleaning solutions in sealed containers whenever the materials are not in use. The permittee shall provide and maintain suitable, easily read, permanent markings on all paints, solvent and cleaning solution containers used with this equipment. [Special Condition No. 3]

Monitoring/Recordkeeping:

1. For ease of accounting, Meramec Group, Inc. may keep track and maintain records of just the installation-wide VOCs emissions monthly to comply with the VOCs emission limitations of Construction Permits #072002-010A, #062005-003 and 042005-002 if:
 - a) the VOCs from the emission unit(s) covered by this permit condition are included, and
 - b) the installation-wide VOCs emissions are less than 40.0 tons for the most recent consecutive 12-month period.
2. Whenever the most recent consecutive 12-month installation-wide sum of VOCs emissions equals 40.0 tons or more, Meramec Group, Inc. shall maintain the monthly and the sum of the most recent consecutive 12-month records of VOCs emissions from the Loni finishing process (EU0060).
 - a) Meramec Group, Inc. shall use Attachment F, or an equivalent form to demonstrate compliance with the VOCs emission limitation of Permit No. 042005-002
 - b) Meramec Group shall continue to maintain separate records for this emission unit until such time as the aggregate VOC emissions from the entire installation has been less than 40 tons for the previous twelve months, at which time it may revert to the recordkeeping method allowed in part 1 of this section..

Reporting:

Meramec Group, Inc. shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of each month, if the records indicate that the 12-month cumulative total of VOCs emissions exceeded the limitation of Special Condition 1A (40 tons of VOC). [Special Condition No. 1C]

Permit Condition EU0060-002

10 CSR 10-5.330

Control of Emissions From Industrial Surface Coating Operations

Emission Limitation:

The permittee shall not emit or discharge into the atmosphere any VOC from coating operations in excess of 3.5 lbs. VOC/gallon coating (minus water and non-VOC organic compounds)

Monitoring:

The permittee shall use the following procedures for determining the daily volume-weighted average (DAVG_{VW}) pounds of VOC emitted per gallon of coating (minus water and non-VOC organic compounds):

1. Calculate the DAVG_{VW} of all coatings used as delivered to the coating applicator(s) using the following formula:

$$\text{DAVG}_{\text{VW}} = \frac{\sum_{i=1}^n (A_i \times B_i)}{C}$$

Where:

A = daily gallons each coating used (minus water and exempt solvents)

B = lbs VOC/gallon coating (minus water and exempt solvents)

C = total daily gallon coatings used (minus water and exempt solvents)

n = number of all coatings used

- a) The permittee shall determine on a daily basis the volume of coatings consumed, as delivered to the coating applicator(s).
 - b) The permittee shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating or from data determined by an analysis of each coating, as received, by EPA Reference Method 24. MDNR may require the owner or operator who uses formulation data supplied by the manufacturer of the coating to determine data used in the calculation of the VOC content of coatings by EPA Reference Method 24 or an equivalent or alternative method.
2. If the volume-weighted average mass of VOC per volume of coating (minus water and non-VOC organic compounds), calculated on a daily basis, is less than 3.5 lbs VOC/gallon coating (minus water and non-VOC organic compounds), the source is in compliance. Each daily calculation is a performance test for the purpose of determining compliance with 10 CSR 10-5.330(4)(B).
 3. Records shall be retained for a minimum of five (5) years. These records shall be made available to the director upon request.

Recordkeeping:

- 1) The owner or operator of a coating line shall keep records detailing specific VOC sources, as necessary to determine compliance (see Attachments D-1 and D-2) These may include:
 - a) The type and the quantity of coatings used daily;
 - b) The coatings manufacturer's formulation data for each coating;
 - c) The type and quantity of solvents for coating, thinning, purging and equipment cleaning used daily;
 - d) All test results to determine capture and control efficiencies, transfer efficiencies and coating makeup;
 - e) The type and quantity of waste solvents reclaimed or discarded daily;
 - f) The quantity of pieces of materials coated daily; and
 - g) Any additional information pertinent to determine compliance.
- 2) Records such as daily production rates may be substituted for actual daily coating use measurement provided the owner submits a demonstration, approved by the director, that such records are adequate for the purpose

of this rule. This will apply until EPA issues national daily emissions recordkeeping protocols for specific industrial classifications.

Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any deviation from or exceedance of any of the terms imposed by this regulation, or any malfunction which causes a deviation from or exceedance of this regulation.

EU0070 Automated Painting Process	
General Description:	Automated Painting Process – applies paint to finished shoe soles
Manufacturer/Model #:	Motoman and Fanuc Motoman: UP-50 Fanuc: M-161
EIQ Reference # :	EP-28 (Meramec Industries)

Permit Condition EU0070-001

10 CSR 10-6.060

Construction Permits Required

Construction Permit No.: 062005-003

Amendment Permit No.: 062005-003A

Emission Limitation:

Meramec Group, Inc. shall emit less than 40.0 tons of VOCs into the atmosphere from the automated finishing operation (EU0070) in any consecutive 12-month period. [Permit No. 062005-003A, Special Condition 1A]

Operational Limitation/Equipment Specifications:

1. When considering using a paint in the automated finishing operation (EP-28) that is different to those listed in the Application for Authority to Construct, the permittee must calculate the potential emissions for each individual HAP in the alternate paint. If the potential HAP emissions for the alternate paint is equal to greater than 10 tons per year for each individual HAP or 25 tons per year for total HAPs, or if it is equal to or greater than the Screen Modeling Action Levels (SMAL) for any chemical listed in Attachment I, then the permittee must seek approval from the Air Pollution Control Program before use of the alternate paint.
[Permit No. 062005-003A, Special Condition 1C]
2. High efficiency filters must be in use at all times when the spray guns are in operation and shall be operated and maintained in accordance with the manufacturer's specifications.
[Permit No. 062005-003, Special Condition 2]
3. The permittee shall keep the paint solvents and cleaning solutions in sealed containers whenever the materials are not in use. The permittee shall provide and maintain suitable and easily read permanent markings on all paints, solvent and cleaning solution containers used with this equipment.
[Permit No. 062005-003, Special Condition 3]

Monitoring/Recordkeeping:

1. For ease of accounting, Meramec Group, Inc. may keep track and maintain records of just the installation-wide VOCs emissions monthly to comply with the VOCs emission limitations of Construction Permits #072002-010A, #062005-003 and 042005-002 if:
 - a) the VOCs from the emission unit(s) covered by this permit condition are included, and
 - b) the installation-wide VOCs emissions are less than 40.0 tons for the most recent consecutive 12-month period.

2. Whenever the most recent consecutive 12-month installation-wide sum of VOCs emissions equals 40.0 tons or more, Meramec Group, Inc. shall maintain the monthly and the sum of the most recent consecutive 12-month records of VOCs emissions from the automated finishing operation (EU0070).
 - a) Meramec Group, Inc. shall use Attachment G, or an equivalent form approved by the Air Pollution Control Program, to demonstrate compliance with the VOCs emission limitation of Permit No. 062005-003A.
 - b) Meramec Group shall continue to maintain separate records for this emission unit until such time as the aggregate VOC emissions from the entire installation has been less than 40 tons for the previous twelve months, at which time it may revert to the recordkeeping method allowed in part 1 of this section..
3. Attachment H or equivalent form approved by the Air Control Program shall be used to demonstrate compliance with Special Condition 1C of Permit Number 062005-003A.
[Permit No. 062005-003A, Special Condition 1D]

Reporting:

Meramec Group, Inc. shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of each month, if the records indicate that the 12-month cumulative total of VOCs emissions exceeded the limitation of Special Condition 1A (40 tons of VOC).
[[Permit No. 062005-003, Special Condition 1D]

Permit Condition EU0070-002

10 CSR 10-5.330

Control of Emissions From Industrial Surface Coating Operations

Emission Limitation:

The permittee shall not emit or discharge into the atmosphere any VOC from coating operations in excess of 3.5 lbs. VOC/gallon coating (minus water and non-VOC organic compounds)

Monitoring:

The permittee shall use the following procedures for determining the daily volume-weighted average (DAVG_{vw}) pounds of VOC emitted per gallon of coating (minus water and non-VOC organic compounds):

1. Calculate the DAVG_{vw} of all coatings used as delivered to the coating applicator(s) using the following formula:

$$\text{DAVG}_{vw} = \frac{\sum_{i=1}^n (A_i \times B_i)}{C}$$

Where:

A = daily gallons each coating used (minus water and exempt solvents)

B = lbs VOC/gallon coating (minus water and exempt solvents)

C = total daily gallon coatings used (minus water and exempt solvents)

n = number of all coatings used

- a) The permittee shall determine on a daily basis the volume of coatings consumed, as delivered to the coating applicator(s).
- b) The permittee shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating or from data determined by an analysis of each coating, as received, by EPA Reference Method 24. MDNR may require the owner or operator who uses formulation data supplied by the manufacturer of the coating to determine data used in the calculation of the VOC content of coatings by EPA Reference Method 24 or an equivalent or alternative method.

2. If the volume-weighted average mass of VOC per volume of coating (minus water and non-VOC organic compounds), calculated on a daily basis, is less than 3.5 lbs VOC/gallon coating (minus water and non-VOC organic compounds), the source is in compliance. Each daily calculation is a performance test for the purpose of determining compliance with 10 CSR 10-5.330(4)(B).
3. Records shall be retained for a minimum of five (5) years. These records shall be made available to the director upon request.

Recordkeeping:

- 1) The owner or operator of a coating line shall keep records detailing specific VOC sources, as necessary to determine compliance (see Attachments D-1 and D-2) These may include:
 - a) The type and the quantity of coatings used daily;
 - b) The coatings manufacturer's formulation data for each coating;
 - c) The type and quantity of solvents for coating, thinning, purging and equipment cleaning used daily;
 - d) All test results to determine capture and control efficiencies, transfer efficiencies and coating makeup;
 - e) The type and quantity of waste solvents reclaimed or discarded daily;
 - f) The quantity of pieces of materials coated daily; and
 - g) Any additional information pertinent to determine compliance.
- 2) Records such as daily production rates may be substituted for actual daily coating use measurement provided the owner submits a demonstration, approved by the director, that such records are adequate for the purpose of this rule. This will apply until EPA issues national daily emissions recordkeeping protocols for specific industrial classifications.

Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any deviation from or exceedance of any of the terms imposed by this regulation, or any malfunction which causes a deviation from or exceedance of this regulation.

IV. Core Permit Requirements

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

10 CSR 10-6.050, Start-up, Shutdown and Malfunction Conditions

1. In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days in writing the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
2. The permittee shall submit the paragraph (a.) information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
3. Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph (a.) list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
4. Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
5. Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060, Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065, Operating Permits

The permittee shall file for renewal of this operating permit no sooner than eighteen months, nor later than six months, prior to the expiration date of this operating permit. The permittee shall retain the most current operating permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

10 CSR 10-6.110, Submission of Emission Data, Emission Fees and Process Information

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079 to satisfy the requirements of the Federal Clean Air Act, Title V.
- 3) The fees shall be due April 1 each year for emissions produced during the previous calendar year. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

10 CSR 10-6.130, Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150, Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.180, Measurement of Emissions of Air Contaminants

- 1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-5.040, Use of Fuel in Hand-Fired Equipment Prohibited

It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. This regulation shall apply to all fuel-burning equipment including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, or to fires used for recreational purpose, or to fires used solely for the preparation of food by barbecuing. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

10 CSR 10-5.060, Refuse Not to be Burned in Fuel Burning Installations (Contained in State Implementation Plan)

No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

10 CSR 10- 5.070, Open Burning Restrictions

- 1) The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.
- 2) Exception - Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
- 3) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
 - a) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
 - b) The schedule of burning operations;
 - c) The exact location where open burning will be used to dispose of the trade wastes;
 - d) Reasons why no method other than open burning is feasible; and
 - e) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
- 4) Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt Meramec Group, Inc. from the provisions of any other law, ordinance or regulation.
- 5) The permittee shall maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.

10 CSR 10-5.160, Control of Odors in the Ambient Air

No person shall emit odorous matter as to cause an objectionable odor on or adjacent to:

- 1) Residential, recreational, institutional, retail sales, hotel or educational premises.
- 2) Industrial premises when air containing odorous matter is diluted with 20 or more volumes of odor-free air; or
- 3) Premises other than those in paragraphs (1)A.1. and (2) of the rule when air containing odorous matter is diluted with four or more volumes of odor-free air.

The previously mentioned requirement shall apply only to objectionable odors. An odor will be deemed objectionable when 30% or more of a sample of the people exposed to it believe it to be objectionable in

usual places of occupancy; the sample size to be at least 20 people or 75% of those exposed if fewer than 20 people are exposed.

This requirement is not federally enforceable.

10 CSR 10-5.240, Additional Air Quality Control Measures May be Required When Sources Are Clustered in a Small Land Area

The Air Conservation Commission may prescribe more restrictive air quality control requirements that are more restrictive and more extensive than provided in regulations of general application for:

- 1) Areas in which there are one or more existing sources and/or proposed new sources of particulate matter in any circular area with a diameter of two miles (including sources outside metropolitan area) from which the sum of particulate emissions allowed from these sources by regulations of general application are or would be greater than 2000 tons per year or 500 pounds per hour.
- 2) Areas in which there are one or more existing sources and/or proposed new sources of sulfur dioxide in any circular area with a diameter of two miles from which the sum of sulfur dioxide emissions from these sources allowed by regulations of general application are or would be greater than 1000 tons for any consecutive three months or 1000 pounds per hour.

10 CSR 10-6.100, Alternate Emission Limits

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants

40 CFR Part 61 Subpart M, National Emission Standard for Asbestos

- 1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
- 2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.250, Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82, Protection of Stratospheric Ozone

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR part 82*

10 CSR 10-6.280, Compliance Monitoring Usage

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - ii) 10 CSR 10-6.040, "Reference Methods";
 - iii) 10 CSR 10-6.070, "New Source Performance Standards";
 - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

V. General Permit Requirements

Permit Duration

10 CSR 10-6.065(6)(C)1.B.

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

General Recordkeeping and Reporting Requirements

10 CSR 10-6.065(6)(C)1.C

I) Recordkeeping

- A) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
- B) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.

II) Reporting

- A) The permittee shall submit a report of all required monitoring by:
 - 1) October 1st for monitoring which covers the January through June time period, and
 - 2) April 1st for monitoring which covers the July through December time period.
 - 3) Exception: Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
- B) Each report must identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
- C) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102.
- D) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - 1) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if you wish to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and that you can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
 - 2) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

- 3) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in the permit.
- 4) These supplemental reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- E) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- F) The permittee may request confidential treatment of information submitted in any report of deviation.

Risk Management Plans Under Section 112(r)

10 CSR 10-6.065(6)(C)1.D.

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

Severability Clause

10 CSR 10-6.065(6)(C)1.F.

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

General Requirements

10 CSR 10-6.065(6)(C)1.G

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, will not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.

- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

Incentive Programs Not Requiring Permit Revisions

10 CSR 10-6.065(6)(C)1.H.

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

Compliance Requirements

10 CSR 10-6.065(6)(C)3.

- I) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- II) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
- A) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - B) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - C) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - D) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- III) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
- A) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - B) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- IV) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64

exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:

- A) The identification of each term or condition of the permit that is the basis of the certification,
- B) The current compliance status, as shown by monitoring data and other information reasonably available to the installation,
- C) Whether compliance was continuous or intermittent,
- D) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period, and
- E) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

Permit Shield

10 CSR 10-6.065(6)(C)6.

- I) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
 - A) The applicable requirements are included and specifically identified in this permit; or
 - B) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- II) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
 - A) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
 - B) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - C) The applicable requirements of the acid rain program,
 - D) The administrator's authority to obtain information, or
 - E) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

Emergency Provisions

10 CSR 10-6.065(6)(C)7.

- I) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7. shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - A) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - B) That the installation was being operated properly,
 - C) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - D) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

- II) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Operational Flexibility

10 CSR 10-6.065(6)(C)8.

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program and the Administrator at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that established an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- I) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.
- A) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program and to the Administrator, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and this agency shall place a copy with the permit in the public file. Written notice shall be provided to the administrator and this agency at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, The permittee shall provide notice to the administrator and the permitting authority as soon as possible after learning of the need to make the change.
- B) The permit shield shall not apply to these changes.

Off-Permit Changes

10 CSR 10-6.065(6)(C)9.

- I) Except as noted below, The permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
- A) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; The permittee may not change a permitted installation without a permit revision, if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
- B) The permittee must provide written notice of the change to the permitting authority and to the administrator no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under paragraph (6)(B)3. of this rule. This written notice

shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

- C) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
- D) The permit shield shall not apply to these changes.

Responsible Official

10 CSR 10-6.020(2)(R)12.

The application utilized in the preparation of this was signed by John Offord, Chemist. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

Reopening Permit For Cause

10 CSR 10-6.065(6)(E)6.

In accordance with 10 CSR 10-6.065(6)(E)6.A., this permit may be reopened with cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) MDNR or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

Statement of Basis

10 CSR 10-6.065(6)(E)1.C.

This permit is accompanied by a statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

Attachment A

10 CSR 10-6.170 Compliance Demonstration Fugitive Emission Observations

This attachment or an equivalent may be used to help meet the recordkeeping requirements of Permit Condition PW001.

[illegible]

Attachment B-1

10 CSR 10-6.220 Compliance Demonstration Opacity Emission Observations

This attachment or an equivalent may be used to help meet the recordkeeping requirements of Permit Condition PW002

[illegible]

Attachment B-2

10 CSR 10-6.220 Compliance Demonstration

This attachment or an equivalent may be used to help meet the recordkeeping requirements of Permit Condition PW002.

Method 22 (Outdoor) Observation Log		
Emission Unit		
Observer	Date	
Sky Conditions		
Precipitation		
Wind Direction	Wind Speed	
Sketch process unit: Indicate the position relative to the source and sun; mark the potential emission points and/or the observing emission points.		
Observation Clock Time	Observation Period Duration (minute:second)	Accumulative Emission Time (minute:second)
Begin Observation		
End Observation		

Attachment B-3

**10 CSR 10-6.220 Compliance Demonstration
Method 9 Visual Determination of Opacity**

This attachment or an equivalent may be used to help meet the recordkeeping requirements of Permit Condition PW002.

Method 9 Opacity Emissions Observations	
Company	Observer
Location	Observer Certification Date
Date	Emission Unit
Time	Control Device

Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							

SUMMARY OF AVERAGE OPACITY				
Set Number	Time		Opacity	
	Start	End	Sum	Average

Readings ranged from _____ to _____ % opacity.

Was the emission unit in compliance at the time of evaluation?

YES NO

Signature of Observer

Attachment C

Construction Permit No. 072002-010A – VOC Compliance Worksheet

This form or an equivalent form may be used to record the data required by this permit to demonstrate compliance with Permit Number 072002-010A VOC emissions limitation (Permit Condition EU0010-001 through EU0030-001 and EU0050-001).

This sheet covers the period from _____ to _____
(month, year) (month, year)

Copy this sheet as needed

Column A	¹ Column B	² Column C	³ Column D	⁴ Column E	⁵ Column F
Month	Name of Material Used	Location	Total Monthly Amount of Material Used (gallons)	Emission Factor (lbs/gal)	VOC Emissions (tons)
⁶ TOTAL (Tons per 12-Month Period)					

1. Column B = Material name (please refer to MSDS) used in EU0010, EU0020 (Meramec Industries EP-04 (A-E) + and EP-10), EU0030 and EU0050 (MoldTech EP-02 and EP-06)
2. Column C = Location of material usage (Meramec Industries or MoldTech)
3. Column D = Total monthly amount of material used for EU0010 (EP-04(A-E) +), EU0020 (EP-10), EU0030 (EP-02) and EU0050 (EP-06)
4. Column E = Emission factor in pounds per gallon (please refer to MSDS)
5.
$$\text{Column F} = \left[\frac{(\text{Column D} \times \text{Column E})}{2000} \right]$$
6. Total = (Sum of Column F), total shall be less than 40 tons in any consecutive 12-month period.

Attachment D-1

10 CSR 10-5.330, *Control of Emissions From Industrial Surface Coating Operations*
Compliance Demonstration - Sample Record Form

Daily Record of Substances Used for Coating, Thinning, Purging, and Equipment Cleaning Record

[illegible]

Attachment D-2

10 CSR 10-5.330, *Control of Emissions From Industrial Surface Coating Operations*
Compliance Demonstration - Sample Record Form

Daily Calculation of Compliance with Emission Limit

[illegible]

Notes:

(1) – DAVG_{vw} Daily Volume-Weighted Average (lbs/gal)

Instructions:

- Calculate lbs of VOC per gallon of coating ingredient in Column F by multiplying ingredient's density (Column D) by VOC's content in the ingredient (Column E).
- Calculate gallons of VOC per ingredient per day in Column E by multiplying gallons of ingredient used daily (Column C) times lbs of VOC per gallon of ingredient (Column F)
- Calculate Daily Volume-Weighted Average - (lbs/gal) in Column H as the daily sum of gallons of VOC (Column G) divided by the daily sum of gallons of all coating ingredients used.
- Calculated value of $DAVG_{vw}$ if less than 3.5 lbs VOC per gallon of Coating indicates compliance with the emission limit.

Attachment E

Construction Permit No. 072002-010A – PM₁₀ Compliance Worksheet

This form or an equivalent form may be used to record the data required by this permit to demonstrate compliance with Permit Number 072002-010A PM₁₀ emissions limitation (Permit Condition EU0030-004 through EU0045-004).

This sheet covers the period from _____ to _____
(month, year) (month, year)

Copy this sheet as needed

Column A	Column B	Column C	Column D	Column E	Column F
Emission Unit	Throughput (Note 1)	Units	PM ₁₀ Emission Factor (lbs/unit)	Capture Efficiency (%)	PM ₁₀ Emissions (tons) (Note 3)
EP4A, Sandblaster		Lbs of Abrasive	0.013	50	
PM ₁₀ Emissions from other sources at the installation (Note 2)					0.01
Total PM ₁₀ Emissions from the Installation for this Month (Note 4)					
12-Month PM ₁₀ Emissions Total from the Previous Month's Worksheet (Note 5)					
Monthly PM ₁₀ Emissions Total from Previous Year's Worksheet (Note 6)					
Current 12-Month Total PM ₁₀ Emissions (Note 7)					

Note 1: Throughput should be in the units listed in the Column C.

Note 2: The 0.01 ton of PM₁₀ is the monthly potential emissions for all other PM₁₀ emitting sources at the installation, specifically the spray booth (EP-02), the plasma metal spray booth (EP-03), and the abrasive cleaner with glass beads (EP4B). Meramec Group may choose to keep track of the actual PM₁₀ emissions from these sources rather than using the potential emissions.

Note 3: Column F = [(Column B x Column D) x (1 – Column E/1000)]/2000

Note 4: Sum of PM₁₀ emissions reported in Column F.

Note 5: Running 12-month total of emissions from previous month's worksheet.

Note 6: Emissions reported for this month in the last calendar year.

Note 7: Amount reported for Note 5 minus amount reported for note 6 plus amount reported for Note 4.

Attachment F

Construction Permit No. 042005-002 – VOC Compliance Worksheet

This form or an equivalent form may be used to record the data required by this permit to demonstrate compliance with Permit Number 042005-002 VOC emissions limitation (Permit Condition EU0060-001).

This sheet covers the period from _____ to _____
(month, year) (month, year)

Copy this sheet as needed

Column A	Column B (a)	Column C	Column D	Column E
Material Used (Name, Type)	Amount of Material Used (Include Units)	Density (lbs/gal)	VOC Content (Weight %)	VOC Emissions (tons)
(b) Total VOC Emissions Calculated for this Month in Tons:				
(c) 12-Month VOC Emissions Total from Previous Month's Attachment F, in Tons				
(d) Monthly VOC Emissions Total (b) from Previous Year's Attachment F, in Tons				
(e) Current 12-Month Total of VOC Emissions in Tons: [(b) + (c) – (d)]				

Instructions: Choose appropriate VOC calculation method for units reported:

- (a) 1) If usage is in tons: - [Column B] x [Column D] = [Column E]
2) If usage is in pounds: - [Column B] x [Column D] x [0.0005] = [Column E]
3) If Usage is in gallons: - [Column B] x [Column C] x [Column D] x [0.005] = [Column E]
- (b) Summation of [Column E] in tons
(c) 12-Month VOC emission total (e) from last month's Attachment F, in tons
(d) Monthly VOC emissions total (b) from previous year's Attachment F, in tons
(e) Calculate the new 12-month VOC emissions total. A 12-month VOC emissions total (e) of less than 40.0 tons indicates compliance

Attachment G

Construction Permit No. 062005-003 – VOC Compliance Worksheet

This form or an equivalent form may be used to record the data required by this permit to demonstrate compliance with Permit Number 062005-003 VOC emissions limitation (Permit Condition EU0070-001).

This sheet covers the period from _____ to _____
(month, year) (month, year)

Copy this sheet as needed

Column A	Column B (a)	Column C	Column D	Column E
Material Used (Name, Type)	Amount of Material Used (Include Units)	Density (lbs/gal)	VOC Content (Weight %)	VOC Emissions (tons)
(b) Total VOC Emissions Calculated for this Month in Tons:				
(c) 12-Month VOC Emissions Total from Previous Month's Attachment G, in Tons				
(d) Monthly VOC Emissions Total (b) from Previous Year's Attachment G, in Tons				
(e) Current 12-Month Total of VOC Emissions in Tons: [(b) + (c) – (d)]				

Instructions: Choose appropriate VOC calculation method for units reported:

- (a) 1) If usage is in tons: - [Column B] x [Column D] = [Column E]
- 2) If usage is in pounds: - [Column B] x [Column D] x [0.0005] = [Column E]
- 3) If Usage is in gallons: - [Column B] x [Column C] x [Column D] x [0.005] = [Column E]
- (b) Summation of [Column E] in tons
- (c) 12-Month VOC emission total (e) from last month's Attachment G, in tons
- (d) Monthly VOC emissions total (b) from previous year's Attachment G, in tons
- (e) Calculate the new 12-month VOC emissions total. A 12-month VOC emissions total (e) of less than 40.0 tons indicates compliance

Attachment H

Construction Permit No. 062005-003A – HAPs Calculation Worksheet

This form or an equivalent form may be used to record the data required by this permit to demonstrate compliance with Permit Number 062005-003A HAPs emissions limitation (Permit Condition EU0070-001).

This sheet covers the period from _____ to _____
(month, year) (month, year)

Copy this sheet as needed

[illegible]

Instructions: Calculate the potential emission of each individual HAP contained in the material

- [Column F] = [Column C] x [Column D] x [Column E] x [4.38]
- Screen Modeling Action Levels can be found in Attachment I
- If [Column F] is greater than [Column G] or 10 tons per year, or if the total HAPs for the paint is greater than or equal to 25 tons per year, obtain permission from the Air Pollution Control Program before using this material.

Attachment I

Construction Permit No. 062005-003A – Screen Modeling Action Level

Chemical	CAS#	Emission Threshold Level (ton/year)	Synonyms
Acetaldehyde	75-07-0	9	Acetic Aldehyde, Aldehyde, Ethanal, Ethyl Aldehyde
Acetamide	60-35-5	1	Acetic Acid Amide, Ethanamide
Acetonitrile	75-05-8	4	Methyl Cyanide, Ethanenitrile, Cyanomethane
Acetophenone	98-86-2	1	Acetylbenzene, Methyl Phenyl Ketone, Hypnone
Acetylaminofluorine, [2-]	53-96-3	0.005	N-2-Fluorenyl Acetaminde, N-Fluorene-2-yl Acetamide, 2-Acetamidoefluorene
Acrolein	107-02-8	0.04	Acrylaldehyde, Acrylic Aldehyde, Allyl Aldehyde, Propenal
Acrylamide	79-06-1	0.02	Propenamide, Acrylic Amide, Acrylamide Monomer, Ethylenecarboxamide
Acrylic Acid	79-10-7	0.6	Propenoic Acid, Ethylene Carboxylic Acid, Vinylformic Acid
Acrylonitrile	107-13-1	0.3	Vinyl Cyanide, Cyanoethylene, Propenenitrile
Allyl Chloride	107-05-1	1	1-Chloro-2-Propene, 3-Chloropropylene, Chloroallylene, Alpha-Propylene
Aminobiphenyl, [4-]	92-67-1	1	Biphenylene, P-Phenylaniline, Xenylamine, 4-Aminodiphenyl, 4-Biphenylamine
Aniline	62-53-3	1	Aminobenzene, Phenylamine, Aniline Oil, Aminophen, Arylamine
Anisidine, [Ortho-]	90-04-0	1	O-Methoxyaniline
Antimony Compounds (except those specifically listed)		5	Antimony (Pentachloride, Tribromide, Trichloride, Trifluoride)
Antimony Pentafluoride	7783-70-2	0.1	
Antimony Potassium Tartrate	28300-74-5	1	
Antimony Trioxide	1309-64-4	1	
Antimony Trisulfide	1345-04-6	0.1	
Arsenic and Inorganic Arsenic Compounds		0.005	Arsenic (Diethyl, Disulfide, Pentoxide, Trichloride, Trioxide, Trisulfide), Arsinine, Arsenous Oxide
Benz(a)Anthracene	56-55-3	0.01	
Benz(c)acridine	225-51-4	0.01	
Benzene	71-43-2	2	Benzol, Phenyl Hydride, Coal Naphtha, Phene, Benxole, Cyclohexatriene
Benzidine	92-87-5	0.0003	4,4'-Biphenyldiamine, P-Diaminodiphenyl, 4,4'-Diaminobiphenyl, Benzidine Base
Benzo(a)pyrene	50-32-8	0.01	
Benzo(b)fluoranthene	205-992	0.01	
Benzotrichloride	98-07-7	0.006	Benzoic Trichloride, PhenylChloroform, Trichloromethylbenzene
Benzyl Chloride	100-44-7	0.1	Alpha-Chlorotoluene, Tollyl Chloride
Beryllium Compounds (except Beryllium Salts)		0.008	Beryllium (Acetate, Carbonate, Chloride, Fluoride, Hydroxide, Nitrate, Oxide)
Beryllium Salts		0.00002	
Bis(Chloroethyl)Ether	111-44-4	0.06	Dichloroethyl ether, Dichloroether, Dichloroethyl Oxide, BCEE
Bis(Chloromethyl)Ether	542-88-1	0.0003	BCME, Sym-Dichloromethyl ether, Dichloromethyl Ether, Oxybis-(Chloromethane)
Butadiene, [1,3-]	106-99-0	0.07	Biethylene, Biviny, Butadiene Monomer, Diviny, Erythrene, Vinylethylene

Chemical	CAS#	Emission Threshold Level (ton/year)	Synonyms
Butylene Oxide, [1,2-]	106-88-7	1	1,2-Epoxybutane, 1-Butene Oxide, 1,2-Butene Oxide, Butylene Oxide, Ethylethylene
Cadmium Compounds		0.01	Cadmium (Dust, Fume, Acetate, Chlorate, Chloride, Fluoride, Oxide, Sulfate, Sulfide)
Carbon Disulfide	75-15-0	1	Carbon Bisulfide, Dithiocarbonic Anhydride
Carbon Tetrachloride	56-23-5	1	Tetrachloromethane, Perchloromethane
Carbonyl Sulfide	463-58-1	5	Carbon Oxide Sulfide, Carbonoxysulfide
Catechol	120-80-9	5	Pyrocatechol, O-Dihydroxybenzene
Chloramben	133-90-4	1	3-Amino-2,5-Dichlorobenzoic Acid, Amben, Amiben*, Vegiben* (*Trademark)
Chlordane	57-74-9	0.01	ENT9932, Octachlor
Chlorine	7782-50-5	0.1	Bertholite
Chloroacetic Acid	79-11-8	0.1	Monochloroacetic Acid, Chloroethanoic Acid
Chloroacetophenone, [2-]	532-27-4	0.06	Phenacyl Chloride, Chloromethyl Phenyl Ketone, Tear Gas, Mace
Chlorobenzilate	510-15-6	0.4	Ethyl-4,4'-Dichlorobenzilate, Ethyl-4,4'-Dichlorophenyl Glycollate
Chloroform	67-66-3	0.9	Trichloromethane
Chloromethyl Methyl Ether	107-30-2	0.1	CMME, Methyl Chloromethyl Ether, Chloromethoxymethane, Monochloromethyl Ether
Chloroprene	126-99-8	1	2-Chloro-1,3-Butadiene, Chlorobutadiene, Neoprene Rubber Compound
Chromic Chloride	10025-73-7	0.1	
Chromium Compounds (except Hexavalent)		5	Chromium, Chromium(II) Compounds, Chromium (III) Compounds
Chromium Compounds, Hexavalent		0.002	Chromium (VI)
Chrysene	218-01-9	0.01	
Cobalt Carbonyl	12010-68-1	0.1	
Cobalt Metal (and compounds, except those specifically listed)		0.1	Cobalt (Bromide, Chloride, Diacetate, Formate, Nitrate, Oxide, Sulfamate)
Coke Oven Emissions	8007-45-2	0.03	Coal Tar, Coal Tar Pitch, Coal Tar Distillate
Cresol, [Meta-]	108-39-4	1	3-Cresol, M-Cresylic Acid, 1-Hydroxy-3-Methylbenzene, M-Hydroxytoluene
Cresol, [Ortho-]	95-48-7	1	2-Cresol, O-Cresylic Acid, 1-Hydroxy-2-Methylbenzene, 2-Methylphenol
Cresol, [Para-]	106-44-5	1	4-Cresol, P-Cresylic Acid, 1-Hydroxy-4-Methylbenzene, 4-Hydroxytoluene
Cresols/ Cresylic Acid (isomers and mixture)	1319-77-3	1	
Cyanide Compounds (except those specifically listed)	20-09-7	5	Cyanide (Barium, Chlorine, Free, Hydrogen, Potassium, Silver, Sodium, Zinc)
DDE (p,p'-Dichlorodiphenyl Dichloroethylene)	72-55-9	0.01	
Di(2-Ethylhexyl)Phthalate, (DEHP)	117-81-7	5	Bis(2-ethylhexyl)Phthalate, Di(2-Ethylhexyl)Phthalate, DOP, Di-Sec-Octyl Phthalate
Diaminotoluene, [2,4-]	95-80-7	0.02	2,4-Toluene Diamine, 3-Amino-Para-Toluidine, 5-Amino-Ortho-Toluidine
Diazomethane	334-88-3	1	Azimethylene, Diazirine
Dibenz(a,h)anthracene	53-70-3		
Dibenzofuran	132-64-9	5	Diphenylene Oxide

Chemical	CAS#	Emission Threshold Level (ton/year)	Synonyms
Dibenzopyrene, [1,2:7,8]	189-55-9		
Dibromo-3-Chloropropane, [1,2-]	96-12-8	0.01	DBCP
Dibromomethane, [1,2-]	106-93-4	0.1	Ethylene Dibromide, Ethylene Bromide, Sym-Dibromoethane
Dichlorobenzene, [1,4-]	106-46-7	3	1,4-Dichloro-P-DCB, 1-4-DCB, PDB, PDCB
Dichlorobenzidene, [3,3-]	91-94-1	0.2	4,4'-Diamino-3,3'-Dichlorobiphenyl, 3,3'-Dichlorobiphenyl-4,4'-Diamine, DCB
Dichloroethane, [1,1-]	75-34-3	1	Ethylidene Dichloride, 1,1-Ethylidene Dichloride, Asymmetrical Dichlorethane
Dichloroethane, [1,2-]	107-06-2	0.8	Ethylene Dichloride, Glycol Dichloride, Ethylene Chloride
Dichloroethylene, [1,1-]	75-35-4	0.4	Vinylidene Chloride, DCE, VDC
Dichloropropane, [1,2-]	78-87-5	1	Propylene Dichloride
Dichloropropene [1,3-]	542-75-6	1	1,3-Dichloropropylene, Alpha-Chlorallyl Chloride
Dichlorvos	62-73-7	0.2	DDVP, 2,2-Dichlorovinyl dimethylphosphate
Diethanolamine	11-42-2	5	Bis(2-Hydroxyethyl)Amine, 2,2'-Dihydroxydiethylamine, Di(2-Hydroxyethyl)Amine
Diethyl Sulfate	64-67-5	1	Diethyl Ester Sulfuric Acid, Ethyl Sulfate
Dimethoxybenzidine, [3,3-]	119-90-4	0.1	Fast Blue B Base, Dianisidine, O-Dianisidine
Dimethylbenz(a)anthracene, [7,12]	57-97-6	0.01	
Dimethyl Benzidine, [3,3-]	119-93-7	0.008	O-Tolidine, Bianisidine, 4,4'-Diamino-3,3'-Dimethylbiphenyl, Diaminoditoyl
Dimethyl Carbamoyl Chloride	79-44-7	0.02	DMCC, Chloroformic Acid Dimethyl Amide, Dimethyl Carbamyl Chloride
Dimethyl Formamide	68-12-2	1	DMF, Formyldimethylamine
Dimethyl Hydrazine, [1,1-]	57-14-7	0.008	Unsymmetrical Dimethylhydrazine, UDMH, Dimazine
Dimethyl Sulfate	77-78-1	0.1	Sulfuric Acid Dimethyl Ester, Methyl Sulfate
Dimethylaminoazobenzene, [4-]	60-11-7	1	N,N-Dimethyl-P-Phenylazo-Aniline, Benzeneazo Dimethylaniline
Dimethylaniline, [N,N-]	121-69-7	1	N,N-Diethyl Aniline, N,N-Dimethylphenylamine, DMA
Dinitro-O-Cresol, [4,6-] and salts	534-52-1	0.1	DNOC, 3,5-Dinitro-O-Cresol, 2-Methyl-4,6-Dinitrophenol
Dinitrophenol, [2,4-]	51-28-5	1	DNP
Dinitrotoluene, [2,4-]	121-14-2	0.02	Dinitrotoluol, DNT, 1-Methyl-2,4-Dinitrobenzene
Dioxane, [1,4-]	123-91-1	6	1,4-Diethyleneoxide, Diethylene Ether, P-Dioxane
Diphenylhydrazine, [1,2-]	122-66-7	0.09	Hydrazobenzene, N,N'-Diphenylhydrazine, N,N'-Bianiline, 1,1'-Hydrodibenzene
Diphenylmethane Diisocyanate, [4,4-]	101-68-8	0.1	Methylene Bis(Phenylisocyanate), Methylene Diphenyl Diisocyanate, MDI
Epichlorohydrin	106-89-8	2	1-Chloro-2,3-Epoxypropane, EPI, Chloropropylene Oxide, Chloromethyloxirane
Ethyl Acrylate	140-88-5	1	Ethyl Propenoate, Acrylic Acid Ethyl Ester
Ethylene Imine (Aziridine)	151-56-4	0.003	Azacyclopropane, Dimethyleneimine, Ethylenimine, Vinylamine, Azirane
Ethylene Oxide	75-21-8	0.1	1,2-Epoxyethane, Oxirane, Dimethylene Oxide, Anprolene
Ethylene Thiourea	96-45-7	0.6	2-Imidazolidinethione, ETU
Fluomine	62207-76-5	0.1	

Chemical	CAS#	Emission Threshold Level (ton/year)	Synonyms
Formaldehyde	50-00-0	2	Oxymethylene, Formic Aldehyde, Methanal, Methylene Oxide, Oxomethane
Glycol Ethers (except those specifically listed)		5	
Heptachlor	76-44-8	0.02	1,4,5,6,7,8,8A-Heptachloro-3A,4,7,7A-Tetrahydro-4,7-Methanoindiene
Hexachlorobenzene	118-74-1	0.01	Perchlorobenzene, HCB, Pentachlorophenyl Benzene, Phenyl Perchloryl
Hexachlorobutadiene	87-68-3	0.9	Perchlorobutadiene, 1,3-Hexachlorobutadiene, HCB
Hexachlorocyclopentadiene	77-47-4	0.1	HCCPD, HEX
Hexachloroethane	67-72-1	5	Perchloroethane, Carbon Hexachloride, HCE, 1,1,1,2,2,2-Hexachloroethane
Hexamethylene Diisocyanate, 1,6-	822-06-0	0.02	1,6-Diisocyanatohexane, 1,6-Hexanediol Diisocyanate
Hexamethylphosphoramide	680-31-9	0.01	Hexamethylphosphoric Triamide, HEMPA, Hexametapol, Hexamethylphosphoramide
Hydrazine	302-01-2	0.004	Methylhydrazine, Diamide, Diamine, Hydrazine Base
Hydrogen Fluoride	7664-39-3	0.1	Hydrofluoric Acid Gas, Fluorhydric Acid Gas, Anhydrous Hydrofluoric Acid
Hydrogen Selenide	7783-07-5	0.1	
Hydroquinone	123-31-9	1	Quinol, Hydroquinol, P-Diphenol, 1,4-Benzenediol, Hydrochinone, Arctuin
Indeno(1,2,3-cd)Pyrene	193-39-5	0.01	
Lead and Compounds (except those specifically listed)	20-11-1	0.01	Lead (Acetate, Arsenate, Chloride, Fluoride, Iodide, Nitrate, Sulfate, Sulfide)
Lindane [Gamma-Hexachlorocyclohexane]	58-89-9	0.01	Benzene Hexachloride - Gamma Isomer
Maleic Anhydride	108-31-6	1	2,5-Furanediene, Cis-Butenedioic Anhydride, Toxilic Anhydride
Manganese and Compounds (except those specifically listed)	20-12-2	0.8	Manganese (Acetate, Chloride, Dioxide, (II)-Oxide, (III)-Oxide, (II)-Sulfate
Mercury Compounds (except those specifically listed)	20-13-3	0.01	Mercury Compounds (Methyl-, Ethyl-, Phenyl-)
Mercury Compounds (Inorganic)	20-13-3	0.01	Mercury (Chloride, Cyanide, (I,II)-[Bromide, Iodide, Nitrate, Sulfate], Oxide)
Methyl Hydrazine	60-34-4	0.06	Monomethylhydrazine, Hydrozomethane, 1-Methylhydrazine
Methyl Iodide	74-88-4	1	Idomethane
Methyl Isocyanate	624-83-9	0.1	Isocyanatomethane, Isocyanic Acid, Methyl Ester
Methylcyclopentadienyl Manganese	12108-13-3	0.1	
Methylene Bis(2-Chloroaniline), [4,4-]	101-14-4	0.2	Curene, MOCA, 4,4'-Diamino-3,3'-Dichlorodiphenylmethane
Methylenedianiline, [4,4-]	101-77-9	1	4,4'-Diaminodiphenylmethane, DDM, MDA, Bis(4-Aminophenyl)Methane, DAPM
Nickel Carbonyl	13463-39-3	0.1	
Nickel Compounds (except those specifically listed)		1	Nickel (Acetate, Ammonium Sulfate, Chloride, Hydroxide, Nitrate, Oxide, Sulfate)
Nickel Refinery Dust	12035-72-2	0.08	
Nickel Subsulfide		0.04	

Chemical	CAS#	Emission Threshold Level (ton/year)	Synonyms
Nitrobenzene	98-95-3	1	Nitrobenzoil, Oil of Mirbane, Oil of Bitter Almonds
Nitrobiphenyl, [4-]	92-93-3	1	4-Nitrodiphenyl, P-Nitrobiphenyl, P-Nitrophenyl, PNB
Nitrophenol, [4-]	100-02-7	5	4-Hydroxynitrobenzene, Para-Nitrophenol
Nitropropane, [2-]	79-46-9	1	Dimethylnitromethane, Sec-Nitropropane, Isonitropropane, Nitroisopropane
Nitroso-N-Methylurea, [N-]	684-93-5	0.0002	N-Methyl-N-Nitrosourea, N-Nitroso-N-Methylcarbamide
Nitrosodimethylamine, [N-]	62-75-9	0.001	Dimethylnitrosamine, DMN, DMNA
Nitrosomorpholine, [N-]	59-89-2	1	4-Nitrosomorpholine
Parathion	56-38-2	0.1	DNTP, Monothiophosphate, Diethyl-P-Nitrophenyl
PCB (Polychlorinated Biphenyls)	1336-36-3	0.009	Aroclors
Pentachloronitrobenzene	82-68-8	0.3	Quintobenzene, PCNB, Quiniozene
Pentachlorophenol	87-86-5	0.7	PCP, Pencilorol, Pentachlorophenate, 2,3,4,5,6-Pentachlorophenol
Phenol	108-95-2	0.1	Carbolic Acid, Phenic Acid, Phenylic Acid, Phenyl Hydrate, Hydroxybenzene
Phenyl Mercuric Acetate	62-38-4	0.01	
Phosgene	75-44-5	0.1	Carbonyl Chloride, Carbon Oxychloride, Carbonic Acid Dichloride
Phosphine	7803-51-2	5	Hydrogen Phosphide, Phosphoretted Hydrogen, Phosphorus Trihydride
Phosphorous (Yellow or White)	7723-14-0	0.1	
Phthalic Anhydride	85-44-9	5	Phthalic Acid Anhydride, Benzene-O-Dicarboxylic Acid Anhydride, Phthalandione
Polycyclic Organic Matter (except those specifically listed)	TP15	0.01	POM, PAH, Polyaromatic Hydrocarbons,
Potassium Cyanide	151508	0.1	
Propane Sultone, [1,3-]	1120-71-4	0.03	1,2-Oxathiolane-2,2-Dioxide, 3-Hydroxy-1-Propanesulphonic Acid Sultone
Propiolactone, [Beta-]	57-57-8	0.1	2-Oxeatanone, Propiolactone, BPL, 3-Hydroxy-B-Lactone-Propanoic Acid
Propionaldehyde	123-38-6	5	Propanal, Propyl Aldehyde, Propionic Aldehyde
Propylene Oxide	75-56-9	5	1,2-Epoxypropane, Methylene Oxide, Methyl Oxirane, Propene Oxide
Propyleneimine, [1,2-]	75-55-8	0.003	2-Methyl Aziridine, 2-Methylazacyclopropane, Methyleneimine
Quinoline	91-22-5	0.006	1-Azanaphthalene, 1-Benzazine, Benzo(B)Pyridine, Chinoline, Leuoline
Quinone	016-51-4	5	Benzoquinone, Chinone, P-Benzoquinone, 1,4-Benzoquinone
Selenium and Compounds (except those specifically listed)	7782-49-2	0.1	Selenium (Metal, Dioxide, Disulfide, Hexafluoride, Monosulfide)
Sodium Cyanide	143339	0.1	
Sodium Selenate	13410010	0.1	
Sodium Selenite	101020188	0.1	
Styrene	100-42-5	1	Cinnamene, Cinnamol, Phenethylene, Phenylethylene, Vinylbenzene
Styrene Oxide	96-09-3	1	Epoxyethylbenzene, Phenylethylene Oxide,

Chemical	CAS#	Emission Threshold Level (ton/year)	Synonyms
			Phenyl Oxirane, Epoxystyrene
Tetrachlorodibenzo-P-Dioxin	1746-01-6	6.00E-07	
Tetrachloroethane, [1,1,2,2-]	79-34-5	0.3	Sym-Tetachloroethane, Acetylene Tetrachloride, Ethane Tetrachloride
Tetraethyl Lead	78-00-2	0.01	
Tetramethyl Lead	75-74-1	0.01	
Titanium Tetrachloride	7550-45-0	0.1	Titanium Chloride
Toluene Diisocyanate, [2,4-]	584-84-9	0.1	TDI, Tolyene Diisocyante, Diisocyanatoluene
Toluidine, [Ortho-]	95-53-4	4	Ortho-Aminotoluene, Ortho-Methylaniline, 1-Methyl-1,2-Aminobenzene
Toxaphene	8001-35-2	0.01	Chlorinated Camphene, Camphechlor, Polychlorcamphene
Trichloroethane, [1,1,2-]	79-00-5	1	Vinyl Trichloride, Beta-Trichloroethane
Trichlorophenol, [2,4,5-]	95-95-4	1	2,4,5-TCP
Trichlorophenol, [2,4,6-]	88-06-2	6	2,4,6-TCP
Trifluralin	1582-09-8	9	2,6-Dinitro-N-N-Dipropyl-4-(Trifluoromethyl)Benzeneamine
Trimethylpentane, [2,2,4-]	540-84-1	5	Isobutyltrimethylethane, Isoctane
Urethane [Ethyl Carbamate]	51-79-6	0.8	Ethyl Urethane, O-Ethylurethane, Leucothane, NSC 746, Urethan
Vinyl Acetate	108-05-4	1	Acetic Acid Vinyl Ester, Vinyl Acetate Monomer, Ethenyl Ethanoate
Vinyl Bromide	593-60-2	0.6	Bromoethylene, Bromoethene
Vinyl Chloride	75-01-4	0.2	Chloroethylene, Chloroethene, Monochloroethylene

STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Renewal Application, received December 17, 2004; revised August 29, 2005;
- 2) Initial Part 70 Operating Permit (OP2000-060) issued May 18, 2000;
- 3) 2004 Emissions Inventory Questionnaire, received March 18, 2005;
- 4) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
- 5) Part 70 Operating Permit 112J Revision P1 (Project No. 2002-05-038);
- 6) Permit to Construct, Permit Number: 0389-005A;
- 7) Permit to Construct, Permit Number: 0195-025;
- 8) Permit to Construct, Permit Number: 0699-030;
- 9) Permit to Construct, Permit Number: 052002-018; and
- 10) Permit to Construct, Permit Number: 072002-010;

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

10 CSR 10-5.030, *Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*

The significant emission sources at this installation do not meet the definition of "indirect heating" as specified in 10 CSR 10-6.020, "...for the primary purposes of producing steam, hot water or hot air or other indirect heating of liquids, gases or solids where, in the course of doing so, the products of combustion do not come into direct contact with process materials."

The installation has reported insignificant emission source(s) (i.e. natural gas fired 2.315 MMBtu/hr boilers, 2.18 MMBtu/hr space heaters and 1.6742 MMBtu/hr water heaters) which are subject to the requirements of this rule. However, the APCP does not consider these sources to be capable of exceeding the particulate matter (PM) emission limitation (0.40 pounds of particulate matter per million Btu's of heat input) of this rule.

Therefore, as the significant emission sources were not considered to meet the indirect heating definition and the remaining insignificant emission units are always expected to be in compliance

with the PM limitation, this rule was not included in the applicable requirements section of this operating permit.

10 CSR 10-5.300, *Control of Emissions From Solvent Metal Cleaning*

The mold cleaner listed in the operating permit as emission unit without limitation uses acetone and m-pyrol as the cleaning solvents. This unit does not fit the definition of cold cleaner in that the equipment does not contain and/or use liquid solvents into which parts are placed to remove soils from the surface of the parts or to dry the parts.” Rags are used to wipe down the molds during cleaning under a ventilated hood. Therefore, 10 CSR 10-5.300 is not applicable to this operation.

10 CSR 10-5.455, *Control of Emissions From Solvent Cleanup Operations*

This rule applies to any person who performs or allows the performance of any cleaning operation involving the use of a volatile organic compound (VOC) solvent or solvent solution. The provisions of this rule shall not apply to any stationary source at which cleaning solvent VOCs are emitted at less than five hundred (500) pounds per day.

The estimated VOC potential emission from the mold cleaning operation is about 7.5 tons per year (41 pounds per day). Therefore, 10 CSR 10-5.455 is not applicable to this installation.

10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*

This rule is amended to update emission limits and references to regulations, changes the rule organization, and brings the rule up to date. The amended rule clarifies applicability of sources subject to New Source Performance Standards and this rule. The amended rule also includes an exemption for combustion equipment that uses exclusively pipeline grade natural gas as defined in 40 CFR 72.2 or liquefied petroleum gas as defined by American Society for Testing and Materials (ASTM), or any combination of these fuels.

All the combustion equipment at the installation use pipeline grade natural gas and are exempt from the requirements of this rule.

Construction Permit Revisions

- 1) Construction Permit Number 072002-010A
Construction Permit Number 062005-003
Construction Permit Number 042005-002

Each Construction permit has an individual 40-ton limit for VOC emissions. In order to ease its recordkeeping burden, and because actual emissions from the equipment covered in these three construction permits together total less than 40 tons per year, Meramec requested that it be allowed to track the combined emissions from the equipment covered under these three construction permits. To demonstrate compliance with these limits, the monitoring/recordkeeping portions of these permits were modified to allow Meramec to keep one emission calculation spreadsheet that totals the affected VOC emissions from all emission units. Currently, total reportable VOC emissions are well under 40 tons. But if the plant-wide total VOC emissions equal or exceed 40 tons, Meramec will break down the totals and track emissions from the individual emission units per the three construction permits to ensure compliance with each of the construction permits. Meramec may revert to tracking the total VOC emissions upon its demonstration that the total emissions have been below the 40-ton limit for a period of twelve months.

- 2) The construction permits 0389-005A, 0195-025 and 0699-030 did not include any special conditions, therefore they are not incorporated by reference into this permit.
- 3) Since construction permit 072002-010A replaced construction permit 072002-010 and superceded all special conditions found in construction permit 052002-018, construction permits 072002-010 and 052002-018 are not incorporated by reference into this permit.

NSPS Applicability

None.

MACT Applicability

40 CFR Part 63, Subpart PPPP, *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products*

The requirements of this subpart do not apply to this installation since this installation is not a major source, and is not part of a major source of emissions of HAPs.

40 CFR Part 63, Subpart T, *National Emission Standards for Halogenated Solvent Cleaning*

The provisions of this subpart apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. Wipe cleaning activities, such as using a rag containing halogenated solvent are not covered under the provisions of this subpart.

Since cleaning is not performed with a machine but with rags to wipe down the molds during cleaning under a ventilated hood and halogenated solvents as defined in 40 CFR 63.460 are not used, the mold cleaning operation is not subject to the MACT standards for halogenated solvent cleaning.

NESHAP Applicability

40 CFR Part 61 Subpart M, *National Emission Standard for Asbestos*, §61.145(a), Standard for demolition and renovation, applies to the installation.

CAM Applicability

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that meets all of the following:

- Be subject to an emission limitation or standard, and
- Use a control device to achieve compliance, and
- Have pre-control emissions that exceed or are equivalent to the major source threshold.

40 CFR Part 64 is not applicable because none of the pollutant-specific emission units' pre-control emissions exceed or are equivalent to the major source threshold.

Other Regulatory Determinations

10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Process*

Calculation of the PM limits and emission rates of emission units subject to 10 CSR 10-6.400. Process information and data used in these calculations are from the Part 70 Operating Permit Renewal Application, received December 17, 2004:

EU0020 – Paint Spray Booths (EP-10)

Maximum hourly design rate = 4.5 gallons of coating per hour

Density of coating = 7.57 lb/gal

Percent solids by weight = 6.6%

Transfer efficiency = 75%

High efficiency filter PM control = 98.6%

Process Weight rate (P) = (4.5 gal/hr) x (7.57 lb/gal) x (0.005 ton/lb) = 0.017 ton/hr

Emission Limit (lb/hr) = $4.1P^{0.67} = 4.1 \times 0.017^{0.67} = 0.27 \text{ lb PM/hr}$

PM uncontrolled emission = (4.5 gal/hr) x (7.57 lbs/gal) x (0.066) x (1-0.75) = 0.56 lb/hr

PM controlled emission = 0.56 lbs/hr x (1 - 0.986) = 0.008 lb/hr

The permittee is required to monitor the corresponding emission control equipment and adhere to recordkeeping and reporting requirements. The rationale behind this request is that because the uncontrolled potential emissions are much larger than the corresponding limit. In case of the control equipment failing the installation would very likely emit far in excess of the limit. Periodic monitoring of the equipment will assure its proper working conditions.

EU0030 – Paint Spray Booths for Urethane Molds (EP-02)

Maximum hourly design rate = 0.062 gallons of coating per hour

Density of coating = 8.2 lb/gal

Percent solids by weight = 64.38%

Transfer efficiency = 75%

High efficiency filter PM control = 98.6%

PM uncontrolled emission = (0.062 gal/hr) x (8.2 lb/gal) x (0.6438) x (1-0.75) = 0.08 lbs/hr

Per 10 CSR 10-6.400(1)(B)11., this unit with potential to emit < 0.5 lb/hr of PM is not subject to the requirements of this rule.

EU0035 - Plasma Metal Spray Booth (EP-03)

Maximum hourly design rate = 1 .0 lbs of wire per hour

Emission factor = 24.1 lb/1000 lbs

PM emission = (0.001x 10³ lbs) x (24.1 lb/10³ lbs) = 0.02 lbs/hr

Per 10 CSR 10-6.400(1)(B)11., this unit with potential to emit < 0.5 lb/hr of PM is not subject to the requirements of this rule.

EU0040 – Sandblasting Operation (EP-04A)

The emissions from the sandblasting operation are contained in an enclosure without a forced-air vent or stack. Since the particulate emissions are not discharged into the ambient air through a definite vent or stack, the requirements of this rule does not apply to this operation.

EU0045 – Abrasive Cleaning (EP-04B)

The abrasive cleaning operation is equipped with fabric filter dust collector. Particulate emissions from the abrasive cleaning operation are collected by fabric filter dust collector which is inherent to the processes. Emissions from this unit are not vented through a discrete stack or vent into the ambient air. Therefore, this rule is not being applied to these units.

EU0060 – Loni Finishing Process (EP-27)

Maximum hourly design rate = 3.07 gallons of coating per hour

Density of coating = 7.57 lb/gal
Percent solids by weight = 6.6%
Transfer efficiency = 75%
High efficiency filter PM control = 98.6%
PM uncontrolled emission = $(3.07 \text{ gal/hr}) \times (7.57 \text{ lb/gal}) \times (0.066) \times (1-0.75) = 0.38 \text{ lbs/hr}$

Per 10 CSR 10-6.400(1)(B)11., this unit with potential to emit < 0.5 lb/hr of PM is not subject to the requirements of this rule.

EU0070 – Automated Painting Process (EP-28)

Maximum hourly design rate = 3.07 gallons of coating per hour
Density of coating = 7.57 lb/gal
Percent solids by weight = 6.6%
Transfer efficiency = 75%
High efficiency filter PM control = 98.6%
PM uncontrolled emission = $(3.07 \text{ gal/hr}) \times (7.57 \text{ lb/gal}) \times (0.066) \times (1-0.75) = 0.38 \text{ lbs/hr}$

Per 10 CSR 10-6.400(1)(B)11., this unit with potential to emit < 0.5 lb/hr of PM is not subject to the requirements of this rule.

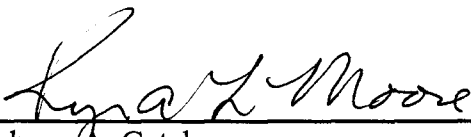
Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

- 1) The specific pollutant regulated by that rule is not emitted by the installation;
- 2) The installation is not in the source category regulated by that rule;
- 3) The installation is not in the county or specific area that is regulated under the authority of that rule;
- 4) The installation does not contain the type of emission unit which is regulated by that rule;
- 5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the APCP's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Prepared by:



for Berhanu A. Getahun
Environmental Engineer